



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

EXAMINER

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/501,033

Applicant(s)

MESS, LEONARD E

Examiner

VINH P NGUYEN

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2858

1. Claims 1-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1,9,19,35,42,47 and 57, it is unclear what is meant by "unembedded into said substrate". Does it mean that there is no recess in the substrate? If it is, the limitations of claims 8, 18,23,34,41,45,50,55,60 are improperly claimed. In claims 6,16 and 32,it is unclear what "an adhesive" represent. Is it shown in any of drawings?

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

2. Claims 6,16 and 32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It appears that the limitations of claims 6,16 and 32 do not have support in the specification.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2858

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

- 4 Claims 1-5,7,9,12-15,17, 19-21,28-31,33, 35,38-40,42-44,46-49,51-54,56-59,61 (insofar as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Hembree et al (Pat # 5,424,652).

As to claims 1-5,7,9,12-13,15,17,19,22,28-30,33,35,38-40,42-44,46-49,51-54,56-59 and 61, Hembree et al disclose an apparatus for testing a semiconductive device (24) having an interposer (14) with a ceramic substrate (14A) with an outmost surface and being configured for receiving thereon the semiconductive device such that the device lies at least in part of the outermost surface and is unimbedded into the substrate (14), electrical conductors (14B) on the substrate (14) with receiving ends connected to the electrical leads (20) of the semiconductive device (24) and with terminal ends (opposite ends of the receiving ends) connected to a testing apparatus. As to claims 14, 31, Hembree et al also disclose a resilient metal clip (34) for holding the interposer (14) stationary relative to the semiconductive device (24) and for biasing the receiving end of the conductor to the electrical leads (20) of the device (24). As to claims 20-21, it appears that the substrate comprises a substantially planar sheet and a substantially homogenous material.

- 5 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2858

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 10-11, 16, 21, 24-27, 32, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hembree et al (Pat # 5,424,652) in view of Pryor et al (Pat # 4,712,161) and Gochnour et al (Pat # 5,678,301).


Hembree et al disclose an apparatus for testing a semiconductive device (24) as mentioned in previous paragraph. As to claim 10, the material for the connector composed of copper and alloys would have been an obvious design choice since the criticality of this material has not been established by Applicants. As to claims 6, 11, 16 and 32, it would have been obvious for one of ordinary skill in the art to provide a coating of an electrically insulating material/adhesive on the connector so that it is isolated from the conductors on the substrate and short circuit is prevented. As to claims 24-25, 36-37, Pryor et al teach that the material for the ceramic substrate such as Alumina, glass or boron nitrides are well known in the art. It would have been well known in the art to make the ceramic substrate of Hembree et al using the material of Pryor et al. As to claims 26-27, Gochnour et al teach that it would have been well known for one of ordinary skill in the art to provide an insulated layer (20) on top of a conductor (22). It would have been obvious for one of ordinary skill in the art to provide an insulated layer on the conductors of Hembree et al as taught by Gochnour et al so that it can be used for preventing the conductors from making contact with other conductors or for heat dissipation.

Art Unit: 2858

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of adhesive as recited in claims 6, 16 and 32, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2858
09/20/2001